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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/396,303	09/15/1999	ALEJANDRO H. SCHWARTZMAN	CISCP092X1/1	7238

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EXAMINER

TRAN, KHANH C

ART UNIT PAPER NUMBER

2631

DATE MAILED: 09/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/396,303

Applicant(s)

SCHWARTZMAN ET AL.

Examiner

Khanh Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2002 & 28 Aug 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-15, 17 and 18 is/are rejected.
- 7) ☒ Claim(s) 6, 7 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The Response, filed on 06/26/2002, and the Supplemental Amendment, filed on 08/28/2002, have been entered. Claims 1-18 are pending in this Office action. New claim 18 is added in this Office action.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-5, 8-15, 17 and 18 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Wang U.S. Patent 6,160,571.

Regarding claim 1, Wang discloses in figure 2 a CATV transceiver circuit including a transmitter section 32 and a receiver section 34. The transmitter 32 (column 6, lines 21-60) comprising TX IN1 and TX IN2 98 data lines to provide differential transmit data to an AGC amplifier 102. The differential transmit data is received and

amplified by the on-chip AGC 104. When enabled, a bias circuit 106, also provided on-chip, provides a bias signal to the AGC 104 to enable the amplification function. A bias signal from the bias circuit 102 is provided on a control line 112 to a driver 108 that is differentially coupled to the output of the AGC amplifier 104. The driver 108 transmits data through the low-pass filter 40 of the diplexer 36 and to the cable plant 14. Wang further teaches that providing a bias signal enables the functional operation of the driver 108 for transmission of data signal. Conversely, withdrawal of the bias signal preferably operates to shut down and terminate power consumption by the driver 108.

Figure 6, column 10, lines 21-52, shows a schematic diagram of an alternate transmitter section in Wang's invention, which includes an electronic switch 144 that selectively couples one end of the second winding of a RF isolation transformer 142 to the Transmit RF Out lead of the diplexer circuit 40 (shown in figure 2) when transmission of an RF signal is enabled. When the state of the PSAVE control signal 110 is set to disable transmission, the switch 144 connects the Transmit RF Out lead of the diplexer circuit 40 through a resistive load to an RF signal ground, thus establishing a fixed termination characteristic for the transmitter portion of the diplexer circuit 40 during periods of RF reception.

Regarding claim 2, claim 1 recites some limitations of claim 2. Wang further discloses in figure 6 a switch 144 functions as a plurality of switches.

Regarding claim 3, claims 1 and 2 recite some limitations of claim 3, Wang teaches that the electronic switch 144 selectively couples one end of the second

winding of a RF isolation transformer 142 to the Transmit RF Out lead of the diplexer circuit 40 (shown in figure 2) when transmission of an RF signal is enabled.

Regarding claim 4, claims 1 and 2 recite some limitations of claim 4. Wang teaches that when the state of the PSAVE control signal 110 is set to disable transmission, the switch 144 connects the Transmit RF Out lead of the diplexer circuit 40 through a 75-ohm resistive load to an RF signal ground, thus establishing a fixed termination characteristic for the transmitter portion of the diplexer circuit 40 during periods of RF reception.

Regarding claim 5, claims 1, 2 and 4 recite some limitations of claim 5. Said switch 144 is attached to a 75-ohm resistive load during periods of RF reception.

Regarding claim 8, claim 1 recites some limitations of claim 8. Figure 6 shows the switch 144 is not contained in any other component in the transmitter.

Regarding claim 9, claim 1 recites some limitations of claim 9. Wang teaches that the electronic switch 144 selectively couples one end of the second winding of a RF isolation transformer 142 to the Transmit RF Out lead of the diplexer circuit 40 (shown in figure 2) when transmission of an RF signal is enabled.

Regarding claims 10 and 18, Wang discloses in figure 2 a CATV transceiver circuit including: a transmitter section 32 and a receiver section 34. The transmitter 32 (column 6, lines 21-60) comprising TX IN1 and TX IN2 98 data lines to provide differential transmit data to an AGC amplifier 102. The differential transmit data is received and amplified by the on-chip AGC 104. When enabled, a bias circuit 106, also provided on-chip, provides a bias signal to the AGC 104 to enable the amplification

function. A bias signal from the bias circuit 102 is provided on a control line 112 to a driver 108 that is differentially coupled to the output of the AGC amplifier 104. The driver 108 transmits data through the low-pass filter 40 of the diplexer 36 and to the cable plant 14. Wang further teaches that providing a bias signal enables the functional operation of the driver 108 for transmission of data signal. Conversely, withdrawal of the bias signal preferably operates to shut down and terminate power consumption by the driver 108. Figure 6, column 10, lines 21-52, shows a schematic diagram of an alternate transmitter section in Wang's invention, which includes an electronic switch 144 that selectively couples one end of the second winding of a RF isolation transformer 142 to the Transmit RF Out lead of the diplexer circuit 40 (shown in figure 2) when transmission of an RF signal is enabled. When the state of the PSAVE control signal 110 is set to disable transmission, the switch 144 connects the Transmit RF Out lead of the diplexer circuit 40 through a resistive load to an RF signal ground, thus establishing a fixed termination characteristic for the transmitter portion of the diplexer circuit 40 during periods of RF reception.

Regarding claim 11, claim 10 recites some limitations of claim 11. Wang discloses, in figure 2, a bias signal from the bias circuit 102 is provided on a control line 112 to a driver 108 that is differentially coupled to the output of the AGC amplifier 104. The driver 108 transmits data through the low-pass filter 40 of the diplexer 36 and to the cable plant 14. Providing a bias signal enables the functional operation of the driver 108 for transmission of data signal. Figure 6, column 10, lines 21-52, shows a schematic diagram of an alternate transmitter section in Wang's invention, which includes an

electronic switch 144 that selectively couples one end of the second winding of a RF isolation transformer 142 to the Transmit RF Out lead of the diplexer circuit 40 (shown in figure 2) when transmission of an RF signal is enabled.

Regarding claim 12, claim 10 recites some limitations of claim 12. Figure 6 shows an electronic switch 144 that selectively couples one end of the second winding of a RF isolation transformer 142 to the Transmit RF Out lead of the diplexer circuit 40 (shown in figure 2) when transmission of an RF signal is enabled.

Regarding claim 13, claims 10 and 12 recite some limitations of claim 13. Switch connecting to a 75-ohm resistive load is open when transmission of an RF signal is enabled.

Regarding claim 14, claim 10 recites some limitations of claim 14. Wang teaches in figure 6 that when the state of the PSAVE control signal 110 is set to disable transmission, the switch 144 connects the Transmit RF Out lead of the diplexer circuit 40 through a 75-ohm resistive load to an RF signal ground, thus establishing a fixed termination characteristic for the transmitter portion of the diplexer circuit 40 during periods of RF reception.

Regarding claim 15, claims 10 and 14 recite some limitations of claim 15. During periods of RF reception, the switch 144 connects the Transmit RF Out lead of the diplexer circuit 40 through a 75-ohm resistive load to an RF signal ground. That effectively disconnects a data signal path to a diplexer circuit 40.

Regarding claim 17, claim 10 recites some limitations of claim 17. Wang discloses, in figure 2, a bias signal from the bias circuit 102 is provided on a control line

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112 to a driver 108 that is differentially coupled to the output of the AGC amplifier 104.

The driver 108 transmits data through the low-pass filter 40 of the diplexer 36 and to the cable plant 14.

Allowable Subject Matter

3. Claims 6, 7 and 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

4. The prior art made of record and not relied upon could be considered pertinent to applicant's disclosure:

Baran et al. U.S. Patent 6,094,211 discloses TV and data cable system ingress noise blocker.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh Tran whose telephone number is 703-305-2384. The examiner can normally be reached on Monday - Friday from 08:00 AM - 04:00 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 703-305-4378. The fax phone numbers for

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the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3800.

KCT
September 18, 2002


CHI PHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600 9/19/02